

# First record of *Pseudohaida rothi* Hatch (Coleoptera: Staphylinidae: Omaliinae) from Canada

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## ABSTRACT

*Pseudohaida rothi* Hatch is reported for the first time from Canada from an old-growth, temperate rain forest on Vancouver Island, B.C. Records of other rare species of the subfamily Omaliinae are given together with a brief discussion of the importance of the remaining intact old-growth forests in preserving the biodiversity contained in the forest regions of Canada.

## DISCUSSION

*Pseudohaida rothi* was described by Hatch (1957), from two specimens collected by Vincent Roth from the Corvallis, Oregon area. No additional specimens had been found when *Pseudohaida* and related genera were revised by Campbell (1978), and until recently, the species continued to be known only from the two original types.

One of us (Campbell) recently examined several large collections of staphylinid beetles made by the second author (Winchester) in his systematic survey of the insects of a northern temperate, coastal, old-growth rain forest in the Upper Carmanah Valley on the west coast of Vancouver Island, British Columbia. These contained five specimens of *Pseudohaida rothi*, collected by Malaise traps between the dates of September 30 to October 27, 1991. In addition to these specimens, members of a number of other species of rare omaliine staphylinids were discovered, including three specimens of *Coryphium arizonense* (Bernhauer), a long series of *Subhaida ingrata* Hatch, one specimen of *Tanyrhinus singularis* Mannerheim, three specimens of *Trigonodemus fasciatus* Leech, and specimens of several new species of Omaliinae which will be described in later papers.

Specimens of each of these species are preserved in the Canadian National Collection of Insects, Centre for Land and Biological Resources Research, Ottawa. It is hoped that these discoveries will contribute to increased appreciation of the importance of intact old-growth forests as reservoirs of biological diversity in the Pacific Rain Forests of Canada. Many species of Coleoptera are restricted to old-growth forests where two important conditions for survival are met: first, a supply of over mature, fallen logs which are allowed to decay under natural conditions in the shade of the forest canopy and, secondly, the maintenance of deep layers of undisturbed forest floor litter which has not been eradicated by the extreme conditions of clear-cutting and subsequent exposure to desiccation and erosion. Forest litter and decaying logs are rich in a large variety of species of fungi, many of which also serve as hosts for species of beetles. It should be noted that many of the species living in these mature forests have minimal dispersal capabilities, thus limiting their ability to repopulate new forests.

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## NOTES

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## REFERENCES

- Campbell, T.M. 1978. A revision of the North American Omaliinae (Coleoptera:Staphylinidae). Mem. ent. Soc. Canada 106:87 pp.
- Hatch, M.H. 1957. The Beetles of the Pacific Northwest. Part II. Staphyliniformia. Univ. Wash. Publ. Biol. 16:384 pp.